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Curriculum Vitae

S. Keith Cole

I. Address

R.J. Reynolds Tobacco Company
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II. Education

- 1979 - B.S. in Chemistry with Honors, cum laude,
University of Alabama, Tuscaloosa, Alabama
- 1986 - Ph.D. Chemical Physics, University of North
Carolina, Chapel Hill, North Carolina

III. Honors and Awards

- 1978 - Award for Outstanding Undergraduate Research
- 1978 - Gamma Sigma Epsilon Chemistry Honorary Society
- 1982 - Dobbins Fellow
- 1984 - North Carolina Governors Science and Technology
Fellow

IV. Scholarly Contributions

A. Publications

Thomas R. Govers, Paul Marie Guyon, Tomas Baer, Keith Cole,
Horst Frolich, and Michel Lavollee, State Selected Ion
Molecule Reactions: $N_2^+(X, v')$, $N_2^+(A, v'')$ + Ar
 $\rightarrow N_2 + Ar^+$, Chem. Phys. 87, 373 (1984).

S. Keith Cole, Tomas Baer, Paul M. Guyon, and Thomas R.
Govers, Symmetric Electron Transfer Reactions of State-
Selected Ions: $H_2^+(v) + H_2 \rightarrow H_2 +$
 $H_2^+(v=0-10)$, Chem. Phys. Lett. 109, 285 (1984).

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S.K. Cole and A.E. DePristo, State to State Differential Cross Sections from Semiclassical Energy Conserving Trajectory Calculations: $H_2^+(v)+H_2(0) \rightarrow H_2(v'')+H_2^+(v')$, J. Chem. Phys. **85**, 1389(1986).

Paul Marie Guyon, Tomas Baer, S. Keith Cole, and Thomas R. Govers, The Charge Transfer and Collision-Induced Dissociation Cross Sections of State-Selected H_2^+ and D_2^+ Ions, Chem. Phys. **119**, 145(1988).

S.K. Cole, K. Liu, and S.J. Riley, Metastable Decay of Photoionized Niobium Clusters: Evaporation vs. Fission Fragmentation, "Physics and Chemistry of Small Clusters", ed. P. Jena, B.K. Rao, and S.N. Khanna, 347(Plenum Press, 1987).

S.K. Cole and K. Liu, Metastable Decay of Photoionized Niobium Clusters: Clusters Within A Cluster?, J. Chem Phys. **89**, 780(1988).

Jhobe Steadman, S. Keith Cole, and Tomas Baer, Visible and Ultraviolet Resonance Enhanced Multiphoton Ionization Photoelectron Spectroscopy of H_2S in the One-Photon Wavelength Region 143-158 nm, J. Chem. Phys. **89**, 5498(1988).

B. Presentations

State Selected Ion Molecule Reactions:

$N_2^+(X,v'), N_2^+(A,v'')+Ar \rightarrow N_2+Ar^+$,
Poster Presentation at the Thirty-First Annual Conference on Mass Spectrometry and Allied Topics, Boston, Mass. May 8-13, 1983.

Metastable Decay of Photoionized Niobium Clusters:
Evaporation vs. Fission Fragmentation, Poster Presentation at the International Symposium on the Physics and Chemistry of Small Clusters, Richmond, Va. Oct. 27 - Nov. 1, 1986.

Metastable Decay of Photoionized Niobium Clusters: Clusters Within A Cluster?, Seminar Presentation at Argonne National Laboratory, Chemistry Division, Argonne, IL May 11, 1987.

Metastable Decay of Photoionized Niobium Clusters, Poster Presentation at the Gordon Research Conference on Metal and Semiconductor Clusters, Plymouth, N.H. Aug. 2-7, 1987.

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